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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/531,249 | REGNIER, LAURENT | |
| | Examiner | Art Unit | |
| | JOSHUA SMITH | 2419 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *29 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-4 and 6-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/29/2008 has been entered.

- **Claims 1-4 and 6-20 are pending.**
- **Claim 5 is cancelled.**
- **Claims 1-4 and 6-20 stand rejected.**

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1-4 and 6-8** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 states "segment containing a message start" and "a segment of the successive segments representing the start and the end of the digital message is classified as a message end". This is indefinite since it is unclear under what condition a segment is classified as a "segment containing a

message start", when a segment contain a start and an end of a message is classified as a "message end".

**Claims 2, 3 and 6-8** are rejected through respective dependence from Claims 1 and 4.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-4 and 6-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nexus 5001 Forum, "Standard for a Global Embedded Processor Debug Interface", IEEE-ISTO, pages 5, 28-29 and 92-97 of 150, in view of Petersen et al. (Patent Number: 5,822,321) and Ho et al. (Pub. No.: US 2003/0169769 A1), hereafter referred to as the Nexus reference, Petersen, and Ho, respectively.

**In regard to Claims 1 and 4**, the Nexus reference teaches in Page 1 of 150, an embedded processor debug interface standard for embedded control applications and where applications include automotive powertrain, data communications, computer peripherals, and other control applications, and, in Page 5 of 150, high-performance on-chip instruction cache and flash, and, in Page 29-29 of 150, and in Figure 5-3, Page 28 of 150, an Emulator connected to a Target and a Host (transmitting between a monitoring circuit integrated to a microprocessor and an analysis tool and means for).

The Nexus reference also teaches in Page 97 of 150, 1st and 5th bullets, a data message is divided into packets, and, in Page 95 of 150, and in Page 96 of 150, Table 8-2, a transfer of an Indirect Branch message involving a transfer protocol, and where packets of the message are transmitted in sections of four bits or less with each count of a clock, and implicitly teaching that the message is to be reconstructed eventually at a receiving end (for each message of digital messages, dividing each data packet of a digital message into successive segments of same predetermined size, and reconstituting packets of each digital message by arranging end to end segments containing data of a same packet).

The Nexus reference also teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message" (each segment of successive segments being classified according to one or the other of five types, segment containing a message start,

intermediary data, a packet end, a message end, or empty segment, and being classified as a segment containing a packet end).

The Nexus reference also teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, two MSEO pins are used to indicate the state of the four-bit transmission at each clock count, and where bit pattern changes between a certain clock count and its previous clock count are used to indicate a state at the certain clock count (sending at the same time as each segment of successive segments an identification signal characterizing a type difference between the considered segment and the previous segment, a segment of successive segments representing a start of a digital message and an end of a first packet of a digital message is classified as containing a packet end).

The Nexus reference fails to teach a segment of successive segments representing a start and an end of a digital message is classifies as a message end, and a segment of successive segments representing a start of a digital message and an end of a first packet of a digital message is classified as containing a packet end.

Petersen teaches in column 4, lines 37-41, and in FIG. 4b, Sheet 2 of 10, if a data packet is so short that it can fit into a single minicell, segmentation is not necessary, and a sending entity will send the data packet to the receiving entity in a single minicell marked "last segment" (a segment of successive segments representing a start and an end of a digital message is classifies as a message end). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Petersen with the teachings of the Nexus reference since Petersen teaches

a method where packets are segmented into minicells, which are transmitted within ATM cells, and where the method ensures that the maximum ATM cell payload is completely utilized by allowing data from more than one minicell to exist within the payload of an ATM cell, providing the most efficient usage of bandwidth, and can be implemented in the system of the Nexus reference to ensure that transfers per clocking period are carrying the maximum amount of data by allowing data from more than one packet or message to exist in a single transfer when a transfer is not filled when transferring data of only a single packet or message.

Ho teaches in paragraph [0044], and in FIG. 6, the MAC sublayer 106 can accommodate uniquely identifiable multiple traffic streams between pairs of stations, and a frame subbody count field 126 indicates a number of frame subbodies 132 contained in the frame 120, where each subbody 132 has an associated sequence control field 128 and a subbody length field 130, and sequence control fields 128 contain sequence control values for each of the frame subbodies 132, and sequence control values include the sequence number of the MSDU in a corresponding frame subbody field 132, where, for example, sequence control field 1 contains sequence control information associated with frame subbody 1, and in accordance with conventional 802.11 protocol, each MSDU is assigned a unique sequence number to enable a receiving station to process the MSDUs in the order in which they were transmitted, and a sequence control field 128 may also include a fragment number, and where all fragments comprising an MSDU are assigned the same sequence number but incremental fragment numbers, thus, if the corresponding frame subbody field 132

contains a fragment of an MSDU, rather than a complete MSDU, the fragment number in the sequence control field 128 includes the correct fragment number (a segment of successive segments representing a start of a digital message and an end of a first packet of a digital message is classified as containing a packet end). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Ho with the teachings of the Nexus reference since Ho provides a system of allowing multiple data units to be transmitted in a frame and to provide accurate information concerning the aspects of those data units being contained, and can be implemented in the system of the Nexus reference to ensure that receivers obtain accurate data for processing packets and reconstructing messages.

**In regard to Claim 2**, the Nexus reference teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, the use of 2-pin MSEO transfers, and teaches that a Start Message can be transferred after an End Message transfer or an Idle transfer (a segment containing a start message may be transmitted after a segment containing a message end or an empty segment), and an Idle transfer can occur after an End Message transfer or after another Idle transfer (a segment containing an empty segment may be transmitted after a segment containing a message end or an empty segment).

The Nexus reference also teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, a Normal Transfer can occur after a Start Message, another Normal

Transfer, or an End Packet (a segment containing intermediary data may be transmitted after a segment containing a message start or intermediary data or a packet end).

The Nexus reference also teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, an End Message transfer can occur after a Start Message transfer, a Normal transfer, or an End Packet transfer, and an End Packet transfer can occur after a Start Message or a Normal Transfer.

The Nexus reference fails to teach an End Message transfer can occur after an Idle transfer, and fails to teach that an End Packet transfer can occur after an Idle transfer or an End Message transfer.

Petersen teaches in column 4, lines 42-52, and in column 5, lines 4-10, and in FIG. 6, Sheet 4 of 10, a reassembly process (item 600) where, after an idle state (item 601), it enters a reassembly state (item 602) whenever a receiving entity receives a minicell marked "last segment", where, as taught in column 4, lines 37-41, if a data packet so short that it can fit into a single minicell, segmentation is not necessary and the data packet (whole message, including its "end") is sent to a receiving entity in a single minicell (single packet, the packet containing the whole message) marked "last segment" (the single packet represented as a "last packet" and contains the message's "beginning" and "end"). Therefore, the combined teachings of the Nexus document and Petersen teach a segment containing a packet end or a message end may be transmitted after a segment of any type. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Petersen with the teachings of the Nexus reference since Petersen teaches a method where packets are

segmented into minicells, which are transmitted within ATM cells, and where the method ensures that the maximum ATM cell payload is completely utilized by allowing data from more than one minicell to exist within the payload of an ATM cell, providing the most efficient usage of bandwidth, and can be implemented in the system of the Nexus reference to ensure that transfers per clocking period are carrying the maximum amount of data by allowing data from more than one packet or message to exist in a single transfer when a transfer is not filled when transferring data of only a single packet or message.

**In regard to Claims 3 and 6**, the Nexus reference teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, a complement MSE has a value equal to "00" when a transfer contains a Start Message or is a Normal Transfer (a first value if a transmitted segment contains a message start or intermediary data).

The Nexus reference also teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, a complement MSE has a value equal to "01" when a transfer contains an End Packet (a second value is a transmitted segment containing a packet end).

The Nexus reference also teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, a complement MSE has a value equal to "10" (a third value).
The Nexus reference also teaches in Page 92 of 150, and in Page 94 of 150, Figure 8-2, a complement MSE has a value equal to "11" for an Idle transfer (a fourth value is a transmitted segment is empty), and for an End Message transfer that follows a Start Message transfer, Normal Transfer, or an End Packet transfer (transmitted segment

contains a message end and if a previous message contained a message start, intermediary data, or a packet end).

The Nexus reference fails to teach a transmitted segment contains a message end (EM) if a previous segment contained a message end (EM) or was an empty segment (ID).

Petersen teaches in column 4, lines 42-52, and in column 5, lines 4-10, and in FIG. 6, Sheet 4 of 10, a reassembly process (item 600) where, after an idle state (item 601), it enters a reassembly state (item 602) whenever a receiving entity receives a minicell marked "last segment", where, as taught in column 4, lines 37-41, if a data packet so short that it can fit into a single minicell, segmentation is not necessary and the data packet (whole message, including its "end") is sent to a receiving entity in a single minicell (single packet, the packet containing the whole message) marked "last segment" (the single packet represented as a "last packet" and contains the message's "beginning" and "end"), and implicitly teaching that a whole data packet, including its "end", can be contained in a single minicell marked "last segment" and the minicell can be contained within an ATM cell and can follow an Idle state, or, as taught in FIG. 4b, Sheet 2 of 10, can follow another minicell containing the end of another packet (item 411) (a transmitted segment contains a message end if a previous segment contained a message end or was an empty segment). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Petersen with the teachings of the Nexus reference since Petersen teaches a method where packets are segmented into minicells, which are transmitted within ATM cells, and

where the method ensures that the maximum ATM cell payload is completely utilized by allowing data from more than one minicell to exist within the payload of an ATM cell, providing the most efficient usage of bandwidth, and can be implemented in the system of the Nexus reference to ensure that transfers per clocking period are carrying the maximum amount of data by allowing data from more than one packet or message to exist in a single transfer when a transfer is not filled when transferring data of only a single packet or message.

**In regard to Claims 7 and 8**, the Nexus reference teaches in Page 97 of 150, 2nd and 3rd bullets, a variable-sized packet may start within a port boundary only when following a fixed-length packet, and whenever a variable-length packet is sized such that it does not end on a port boundary, it is necessary to extend and zero fill remaining bits after a highest-order bit so that it can end on a port boundary (unused most significant bits of a last segment are assigned a predetermined value).

**Claims 9, 10 and 14-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over the Nexus reference in view of Paul Hulme Walker et al. (Pub. No.: US 2003/0091056 A1), hereafter referred to as Walker.

**In regard to Claims 9 and 10**, the Nexus reference teaches in Page 1 of 150, an embedded processor debug interface standard for embedded control applications and where applications include automotive powertrain, data communications, computer peripherals, and other control applications, and, in Page 5 of 150, high-performance on-

chip instruction cache and flash, and, in Page 29-29 of 150, and in Figure 5-3, Page 28 of 150, an Emulator connected to a Target and a Host (transmitting between a monitoring circuit integrated to a microprocessor and an analysis tool).

The Nexus reference also teaches in Page 97 of 150, 1st and 5th bullets, a data message is divided into packets, and, in Page 95 of 150, and in Page 96 of 150, Table 8-2, a transfer of an Indirect Branch message involving a transfer protocol, and where packets of the message are transmitted in sections of four bits or less with each count of a clock, and implicitly teaching that the message is to be reconstructed eventually at a receiving end (dividing each data packet into successive segments of same predetermined size, and reconstituting packets of each message by arranging end to end segments containing data of a same packet).

The Nexus reference also teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message" (each segment being classified according to one or the other of five types, segment containing a message start, intermediary data, a packet end, a message end, or empty segment, and being classified as a segment containing a packet end, sending in sequence a first segment and a second segment).

The Nexus reference fails to teach a first data unit is classified as a message end and a second data unit is classified as a message end.

Walker teaches in paragraphs [0150]-[0152] and [0186]-[0187], and in FIG. 16, an ACTIVE state (item ACTIVE, FIG. 16) in which a condition to remain in an ACTIVE

state is LAST_PACKET_LEVEL WAS_EOP_OR_EOM (FIG. 16), implicitly teaching a condition where it is possible to have two successive conditions where EOMs (end of message) are received successively and keep a device in an active state (a first segment is classified as a message end and a second segment is classified as a message end). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Walker with the teachings of the Nexus reference since Walker provides a system that includes circuitry for interfacing two devices involved in transforming signals and a state machine for ensuring an organized transfer of data based on identifying types of data units, including end of messages (EOM) and end of packets (EOP), and can be incorporated into the teachings of the Nexus reference to provide the capabilities of transformers and to ensure proper identification and transmission of data in implementing such transformers.

**In regard to Claim 14**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a third segment of a plurality of segments, a third segment is classified as message start. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Start Message" labeled section is transmitted after an "End Message" labeled section (a third segment of a plurality of segments, a third segment is classified as message start).

**In regard to Claim 15**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a fourth segment of a plurality of segments, a fourth segment is classified as intermediary data. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Normal Transfer" labeled section is transmitted after an "End Message" labeled section (a fourth segment of a plurality of segments, a fourth segment is classified as intermediary data).

**In regard to Claim 16**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a third segment of a plurality of segments, a third segment is classified as message start. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Start Message" labeled section is transmitted after an "End Message" labeled section (a third segment of a plurality of segments, a third segment is classified as message start).

**In regard to Claim 17**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a fourth segment of a plurality of segments, a fourth segment is classified as intermediary data. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Normal Transfer" labeled section is transmitted after an "Start Message" labeled section (a fourth segment of a plurality of segments, a fourth segment is classified as intermediary data).

**Claims 11-13 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over the Nexus reference in view of Walker, and further in view of Petersen.

**In regard to Claim 11**, as discussed in the rejection of Claim 9, the Nexus reference teaches classifying a segment as an empty segment and classifying a segment as a packet end. The Nexus reference also teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, receiving segments during idle periods where no message is sent (see item Idle, Figure 8-2) before activity involving a message (first segment is classified as an empty segment and a second segment is classified).

The Nexus reference fails to teach a second segment contains a packet end.

Petersen teaches in column 4, lines 42-47, an idle state 601 (FIG. 6), and then shifting to a reassembly state 602 (FIG. 6) when first data arrives (item 604, FIG. 6), and, in column 3, lines 45-56, an ATM cell 410 (segment) may contain multiple minicells 411, 412, 413 (packets) from a user packet 410 (message), and where an end of a minicell 413 is contained in an ATM cell (a second segment contains a packet end). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Petersen with the teachings of the Nexus reference since Petersen teaches a method where packets are segmented into minicells, which are transmitted within ATM cells, and where the method ensures that the maximum ATM cell payload is completely utilized by allowing data from more than one minicell to exist within the payload of an ATM cell, providing the most efficient usage of bandwidth, and

can be implemented in the system of the Nexus reference to ensure that transfers per clocking period are carrying the maximum amount of data by allowing data from more than one packet or message to exist in a single transfer when a transfer is not filled when transferring data of only a single packet or message.

**In regard to Claim 12**, as discussed in the rejection of Claim 9, the Nexus reference teaches classifying a segment as a message end and classifying a segment as a packet end.

The Nexus reference fails to teach a first segment classified as a message end and a second segment contains a packet end.

Petersen teaches in column 3, lines 45-56, an ATM cell 410 (segment) may contain multiple minicells 411, 412, 413 (packets) from a user packet 410 (message), and where an ATM cell contains a minicell 411 with a user packet end and is followed by an ATM cell with a minicell end (a first segment contains a message end and a second segment contains a packet end). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Petersen with the teachings of the Nexus reference since Petersen teaches a method where packets are segmented into minicells, which are transmitted within ATM cells, and where the method ensures that the maximum ATM cell payload is completely utilized by allowing data from more than one minicell to exist within the payload of an ATM cell, providing the most efficient usage of bandwidth, and can be implemented in the system of the Nexus reference to ensure that transfers per clocking period are carrying the maximum

amount of data by allowing data from more than one packet or message to exist in a single transfer when a transfer is not filled when transferring data of only a single packet or message.

**In regard to Claim 13**, as discussed in the rejection of Claim 9, the Nexus reference teaches classifying a segment as an empty segment and classifying a segment as a packet end. The Nexus reference also teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, receiving segments during idle periods where no message is sent (see item Idle, Figure 8-2) before activity involving a message (first segment is classified as an empty segment and a second segment is classified).

The Nexus reference fails to teach a second segment is classified as a message end after an idle segment.

Petersen teaches in column 4, lines 42-47, an idle state 601 (FIG. 6), and then shifting to a reassembly state 602 (FIG. 6) when first data arrives (item 604, FIG. 6), and, in column 4, lines 37-41, and in FIG. 4b, Sheet 2 of 10, if a data packet is so short that it can fit into a single minicell, segmentation is not necessary, and a sending entity will send the data packet to the receiving entity in a single minicell marked "last segment" (a second segment is classified as a message end after an idle segment). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Petersen with the teachings of the Nexus reference since Petersen teaches a method where packets are segmented into minicells, which are

transmitted within ATM cells, and where the method ensures that the maximum ATM cell payload is completely utilized by allowing data from more than one minicell to exist within the payload of an ATM cell, providing the most efficient usage of bandwidth, and can be implemented in the system of the Nexus reference to ensure that transfers per clocking period are carrying the maximum amount of data by allowing data from more than one packet or message to exist in a single transfer when a transfer is not filled when transferring data of only a single packet or message.

**In regard to Claim 18**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a third segment of a plurality of segments, a third segment is classified as message start. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Start Message" labeled section is transmitted after an "End Packet" labeled section and an "End Message" labeled section (a third segment of a plurality of segments, a third segment is classified as message start).

**In regard to Claim 19**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a fourth segment of a plurality of segments, a

fourth segment is classified as intermediary data. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Normal Transfer" labeled section is transmitted after an "Start Message" labeled section (a fourth segment of a plurality of segments, a fourth segment is classified as intermediary data).

**In regard to Claim 20**, as discussed in the rejection of Claim 9, the Nexus reference teaches sending from an integrated circuit to a monitoring tool a segment. The Nexus reference further teaches a third segment of a plurality of segments, a third segment is classified as message start. The Nexus reference teaches in Page 92 of 150, and in Page 96 of 150, Table 8-2, and in Page 94 of 150, Figure 8-2, four-bit transmission sections of the packets are labeled as "Idle", "Start Message", "Normal Transfer", "End Packet", and "End Packet/Message", and where a "Start Message" labeled section is transmitted after an "End Packet" labeled section and an "End Message" labeled section (a third segment of a plurality of segments, a third segment is classified as message start).

***Response to Arguments***

**I. Arguments for Rejections under 35 USC § 112**

Applicant's arguments, see page 8, filed 10/29/2008, with respect to the Claim Rejection under 35 USC § 112 of Claim 5 have been fully considered and are persuasive. The Claim Rejection under 35 USC § 112 of Claim 5 has been withdrawn.

**II. Arguments for Rejections under 35 USC § 103**

Applicant's arguments filed 10/29/2008 have been fully considered but they are not persuasive. Applicant submits that Fig. 16 of the Walker reference does not disclose a next active state in which a packet level is an end of message or an end of packet, and, in fact, none of the succeeding states from the LAST_PACKET_LEVEL WAS_EOP_OR_EOM illustrated in Fig. 16 indicate an end of packet or end of message state, and the Walker reference includes LAST_PACKET_LEVEL WAS_EOP_OR_EOM in Fig. 16, without any corresponding explanation in the specification of Walker. Examiner respectfully disagrees this is sufficient for the withdrawal of the rejection of Claim 9. The Walker reference teaches "end of message" and "end of packet" indications and control code-words in paragraphs [0111] and [0170], and "EOM" and "EOP" are listed in an Appendix 1: Code Table under paragraphs [0215] and [0216]. In any case, the Walker reference is **not** applied in the rejection of Claim 9 to teach an end of packet or end of message **state**. As discussed in the rejection of Claim 9, the Nexus reference teaches an end of packet or end of message **state**. The Walker reference is applied in the rejection of Claim 9 only to teach that **two consecutive EOM's** can occur, and that such an occurrence is related to maintaining a state, and since the Nexus reference teaches a reception and

classification of segments and an "End Message" state, the combination of the Nexus reference and the Walker reference teaches maintaining an "End Message" state after receiving two consecutive EOM's, and, as discussed in the rejection of Claim 9, the combination of the Nexus reference and the Walker reference teaches the limitations "wherein a first segment is classifies as a message end and a second segment is classified as a message end".

Applicant's other arguments with respect to claims 1-4 and 6-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koo et al. (Pub. No.: US 2001/0046220 A1) teaches in paragraph [0602], a UTRAN must receive two consecutive frames with their EOF fields set to `1`.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA SMITH whose telephone number is (571)270-1826. The examiner can normally be reached on Monday-Thursday 9:30am-7pm, Alternating Fridays 9:30am-6pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Joshua Smith
Patent Examiner
04 January 2009

/Hassan Kizou/
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